



A PACER Policy Brief

Patching the Leaky Pipeline: Recruiting and Retaining Teachers of Color in Pennsylvania

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An Important First Step: PDE's Focus on Teacher Diversity

In its Every Student Succeeds Act (ESSA) Plan,¹ recently approved by the United States Department of Education,² the Pennsylvania Department of Education (PDE) was one of only six states in the nation to address the critical need to both recruit and retain more teachers of color.³ PDE has since continued to highlight the need for increased teacher diversity in additional briefings submitted to the State Board of Education and the Chief Academic Officers of the Pennsylvania State System of Higher Education.⁴

PDE's attention to this issue comes with good reason. In recent years, ample research has indicated that exposure to teachers of color has a positive impact on all students, regardless of race and ethnicity, and particularly on students of color.⁵ (See "The Positive Impact of Teachers of Color" call-out box on page 2.) Meanwhile, even as Pennsylvania's overall population has been diversifying,⁶ its teaching staff has not. Although the lack of teachers of color is a national problem, it is particularly acute in Pennsylvania. Nationally, 18% of teachers are persons of color, compared to only 4% of teachers in Pennsylvania.⁷ Moreover, the imbalance between teacher and *student* demographics in Pennsylvania is among the most extreme in the nation.

And the problem appears to be worsening. According to PDE, African American⁸ enrollment in post-secondary education majors has decreased by 60% since 1996, and the number of African American

¹ Under the Every Student Succeeds Act, each state must submit a plan detailing how the requirements of ESSA will be implemented in their state. ESSA requires each state to develop plans on a variety of initiatives ranging from programs supporting effective instruction to planning for the education of migratory children. Pennsylvania's ESSA Plan is available here: *Every Student Succeeds Act: Pennsylvania Consolidated State Plan*, Pennsylvania Department of Education, Jan. 12, 2018, <http://www.education.pa.gov/Documents/K-12/ESSA/Resources/PA%20ESSA%20Consolidated%20State%20Plan%20Final.pdf>. (Hereinafter, "PA ESSA Plan.")

² U.S. Department of Education, *Secretary DeVos Approves Pennsylvania's ESSA State Plan*, Jan. 16, 2018, <https://www.ed.gov/news/press-releases/secretary-devos-approves-pennsylvanias-essa-state-plan>.

³ Each state's ESSA plan is available at the U.S. Department of Education's "ESSA State Plan Submission" webpage: <https://www2.ed.gov/admins/lead/account/stateplan17/statesubmission.html>. Connecticut, Mississippi, Nebraska, Oregon, and Tennessee also included teacher diversity initiatives in their ESSA Plans.

⁴ Pennsylvania Department of Education, *Teacher Certifications and Projections – Bureau of School Leadership and Teacher Quality, Office of Postsecondary & Higher Education, PASSHE Chief Academic Officers Meeting*, Feb. 23, 2018, provided by PDE.

⁵ Throughout this brief, we use the term "of color" to describe all students, teachers, or other groups of people that are not reported as white, including African American, Latinx (both white and non-white), Asian American, Pacific Islander, and Native American populations. In other words, "white" includes only non-Hispanic whites. At times, for simplicity or clarity or when citing to other reports, we interchangeably use the terms "non-white" or "minority."

⁶ Eugene Tauber, *MAP: Racial diversity in Pennsylvania counties*, The Morning Call, June 27, 2017, <http://www.mcall.com/news/local/data/mc-2016-census-map-racial-diversity-in-pennsylvania-counties-20170621-htmlstory.html> (mapping U.S. Census Bureau's recent population estimates showing increased diversity in every county in Pennsylvania).

⁷ U.S. Department of Education, National Center for Education Statistics, *Schools and Staffing Survey*, 2011–12, https://nces.ed.gov/surveys/sass/tables/sass1112_2013314_t1s_001.asp. (Hereinafter, "SASS, 2011-12.")

⁸ Although we use "Black" throughout this brief when referring to people of African descent, we use "African American" where, as here, the data uses that label.

graduates in education has decreased by 71% since 2000.⁹ The problem is particularly stark for Black and Latino men; the state's colleges and universities graduated only 29 African American male and 20 Latino male teachers in 2014,¹⁰ out of a total of 8,552 teacher preparation program completers.¹¹ As noted in Pennsylvania's ESSA plan, these strikingly low numbers create "significant challenges" for schools looking to increase the number of teachers of color on staff.¹²

What is causing this lack of diversity among Pennsylvania's teachers? In this brief, we examine available data to identify and investigate leaks in Pennsylvania's teacher pipeline. We also summarize existing PDE initiatives and highlight examples of promising strategies in other states and communities that policymakers could implement across the Commonwealth to help patch the leaky teacher of color pipeline, from recruitment to retention.

The Positive Impact of Teachers of Color

Research has identified a number of ways in which schools and students benefit from the presence of teachers of color. **In particular, teachers of color have been shown to:**

1. Promote higher expectations for students of color;ⁱ
2. Contribute to positive academic & non-academic outcomes for students of color, such as reduced absenteeism, increased admission to gifted programs, and lower dropout rates;ⁱⁱ
3. Minimize chances that students of color are subjected to discipline that removes them from school;ⁱⁱⁱ
4. Lead to positive long-term outcomes for students of color, like a decreased probability of dropping out in high school and an increased likelihood to aspire to enroll in a four-year college;^{iv}
5. Mitigate implicit bias in all students (i.e. preconceived attitudes and stereotypes that unconsciously affect people's understanding and decisions);^v
6. Improve school climate for all students;^{vi} and
7. Reduce teacher turnover in hard-to-staff schools.^{vii}

The Pennsylvania Context

Pennsylvania has one of the highest disparities between students and teachers of color in the nation. According to the most recent available data, 18% of public school teachers across the nation are persons of color,¹³ compared to 48% of students,¹⁴ a disproportionality rate of 2.62 (i.e., the percentage of students of color divided by the percentage of teachers of color).¹⁵ In Pennsylvania, 29% of students and 4% of teachers are persons of color, which yields a disproportionality rate of 7.34—nearly triple the already disparate national average. Only five states have higher student/teacher racial disproportionality rates. (See Appendix A for each state's raw data.)

⁹ PA ESSA Plan (68).

¹⁰ Ibid.

¹¹ U.S. Department of Education, Office of Postsecondary Education. Higher Education Act Title II reporting system, 2014-15, <https://title2.ed.gov/Public/Home.aspx>. (Hereinafter "HEA Title II reporting system.")

¹² PA ESSA Plan (68).

¹³ SASS, 2011-12.

¹⁴ U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), State Nonfiscal Survey of Public Elementary and Secondary Education, 2011-12, <https://nces.ed.gov/ccd/pubagency.asp>.

¹⁵ Disproportionality rates of greater than 1.0, indicate that the percentage of students of color is greater than the percentage of teachers of color. There are no states with a disproportionality rate of equal or less than 1.0.

Teachers of color are scarce in all parts of the state. Of the 44 Pennsylvania counties for which teacher diversity data are publicly available, only three counties (Philadelphia, Delaware, and Pike) report double-digit percentages of teachers of color in their teaching workforce. In the remaining 41 reporting counties—serving 71.3% of all Pennsylvania students and 53.5% of all students of color in Pennsylvania—the percentage of teachers of color is in the single digits.¹⁶ Six of these counties report no teachers of color.¹⁷ In 23 counties, the data are not reported. (See Appendix B for each county’s raw data.)

In contrast to common assumption, disparities between the percentage of teachers and students of color are not isolated to rural and suburban communities in Pennsylvania. Despite being home to almost half of Pennsylvania’s teachers of color,¹⁸ Philadelphia still enrolls students of color at 2.32 times the rate at which the district employs teachers of color. This is one of the lowest disproportionality rates in Pennsylvania, but it is still barely better than the national average of 2.62. Additionally, the cities of Allentown, Erie, Scranton, and Lancaster¹⁹ all serve students of color at more than ten times the rate at which they employ teachers of color. Reading, which has the highest percentage of students of color (87%) employs just 10% teachers of color. (See Appendix C for each large city’s raw data.)

Identifying and Patching Leaks along Pennsylvania’s Teacher Pipeline

Pennsylvania’s teacher pipeline can best be understood as starting in high school, as students who aspire to teach in high school are more likely to become teachers than those who do not.²⁰ The pipeline then extends through college, certification, and entrance into the teaching profession; it ends at teacher retention. By examining each element of Pennsylvania’s teacher pipeline, we can identify where the Commonwealth is losing potential teachers of color as well as areas where more data reporting could shed light on unexamined weaknesses in the pipeline.

In Figure 1, we report the percentage of people of color at each stage of the pipeline—from high school enrollment to career teacher retention. Where data are not publicly available, the missing data point is represented by a question mark.

¹⁶ U.S. Census Bureau, 5-year American Community Survey (ACS), Equal Employment Opportunity (EEO) Tabulation, 2006-10, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=EEO_10_5YR_EEOALL2W&prodType=table & https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=EEO_10_5YR_EEOALL2W&prodType=table.

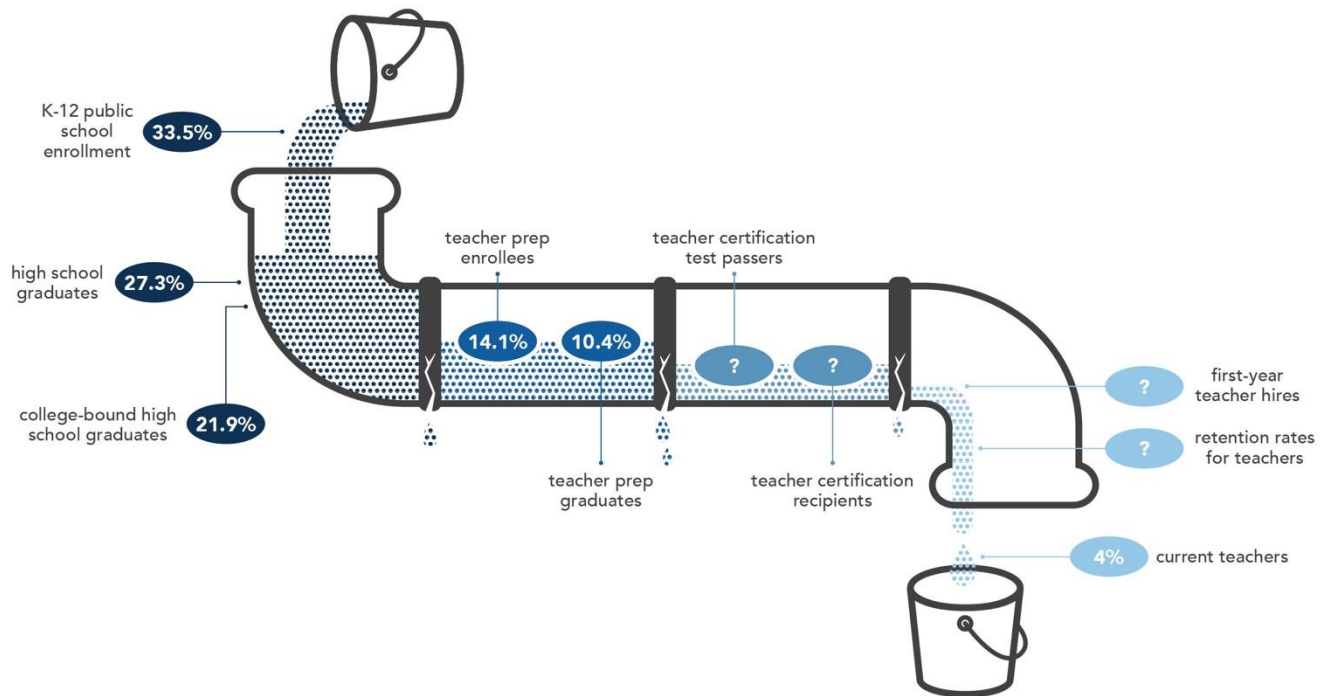
¹⁷ The six counties recorded as having zero percent teachers of color are Armstrong, Clearfield, Blair, Northumberland, Cambria, and Lawrence. See Appendix B.

¹⁸ Teachers of color in Philadelphia comprise 47% of all the teachers of color in Pennsylvania, even though only 35% of the state’s students of color live in Philadelphia. ACS EEO Tabulation, 2006-10; U.S. Department of Education, National Center for Education Statistics (NCES), Education Demographic and Geographic Estimates (EDGE), ACS 2006-10 Profile, <https://nces.ed.gov/programs/edge/TableViewer/acsProfile/2010>.

¹⁹ For our Lancaster comparison, the student population is based on the entire Lancaster School District, which includes both the City of Lancaster and Lancaster Township. The teacher population is based only on the City of Lancaster. See Appendix C for more information.

²⁰ Bradford R. White, Karen J. DeAngelis, and Eric J. Lichtenberger, *The Student Has Become the Teacher: Tracking the Racial Diversity and Academic Composition of the Teacher Supply Pipeline*, Illinois Education Research Council, 2013, https://ierc.education/ierc_publications/the-student-has-become-the-teacher-tracking-the-racial-diversity-and-academic-composition-of-the-teacher-supply-pipeline-2013-3/.

Figure 1. Percentage of People of Color Along Pennsylvania’s Teacher Pipeline



SOURCES: Pennsylvania Department of Education, Pennsylvania Information Management System, *Enrollment Data*, 2016-17; Pennsylvania Department of Education, Division of Data Quality, *Graduates Data*, 2015-16; U.S. Department of Education, Office of Postsecondary Education, Higher Education Act Title II reporting system, 2014-15; U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, 2015-16;²¹ U.S. Department of Education, National Center for Education Statistics, *Schools and Staffing Survey*, 2011-12.

As illustrated in Figure 1, **Pennsylvania loses potential teachers of color at each stage of the pipeline.** Although students of color make up 33.5% of Pennsylvania’s public school population,²² at the end of the pipeline, only 4% of Pennsylvania’s teaching force are teachers of color.

Of course, discussion of initiatives focused on increasing teacher diversity must also acknowledge Pennsylvania’s growing teacher shortage. As discussed in Section 2: Teacher Preparation, both the number of teacher preparation program enrollees and the number of teaching certificates issued by PDE have been precipitously declining in recent years. While this shrinking candidate pool presents a challenge for the state, it may also be an opportunity to diversify Pennsylvania’s incoming teacher corps.





Notably, it will take action from multiple sectors—from state government, to local education agencies, to the colleges and universities that prepare teachers—to create a strong pipeline for teachers of color. Indeed, PDE reiterates its commitment to “continual stakeholder engagement” in its discussion of how it will use data and consultation to update and improve its teacher and principal preparation, training, and recruitment.²³ The strategies identified below will require such a collaborative approach. In the remainder of this brief, we utilize the icons presented in Figure 2 to indicate which sectors are best positioned to implement each strategy:

²¹ Awards/degree conferred by program (CIP), award level, race/ethnicity, and gender. Included bachelor’s degree and post-baccalaureate certificate in the Award Level code.

²² The 33.5% K-12 enrollment for students of color comes from 2016-17 PDE enrollment data, while the 29% enrollment for students of color reported elsewhere in the brief comes from 2011-12 Common Core of Data student membership data. We use the latter when comparing student and teacher percentages, because 2011-12 is the most recent year for which teacher data disaggregated by race is available.

²³ PA ESSA Plan (84).

Figure 2. Sectors Contributing to Pennsylvania’s Teacher Pipeline

POTENTIAL PIPELINE PATCHERS			
PA GENERAL ASSEMBLY	PA DEPT. OF ED.	LOCAL EDUCATION AGENCIES (LEAs) ²⁴	TEACHER PREPARATION PROGRAMS
			

In the following pages, we examine available data and existing research to identify possible leaks in each point of the teachers of color pipeline. We then discuss existing initiatives designed to address these problems and propose additional strategies to help plug leaks and ultimately increase the number of teachers of color in Pennsylvania.

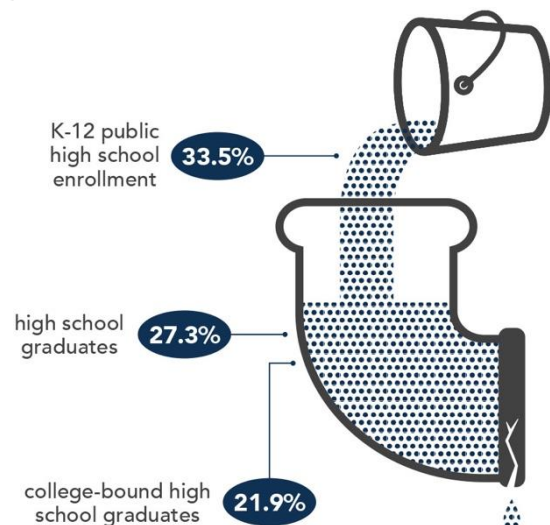
1. High School

Problem

Pennsylvania loses potential teachers of color early in the pipeline:

- High school graduation rates for students of color are low. There is a large gap in high school graduation rates between Pennsylvania’s white students (90.5%) and students of color (75.7%).²⁵ Thus, while students of color comprise 33.5%²⁶ of all public school students in Pennsylvania, they comprise only 27.3%²⁷ of high school graduates.
- Fewer high school graduates of color are college-bound. Less than 50% of Black and Latinx high school graduates attend college after graduation, compared to over 70% of white graduates. Students of color account for only 21.9% of college-bound high school graduates.²⁸

Figure 3. Pennsylvania Teachers of Color Pipeline: High School



²⁴ Local education agencies (LEAs) can include school districts, charter schools, area vocational technical schools (AVTSS), and career and technical centers (CTCs).

²⁵ Pennsylvania Department of Education, Division of Data Quality, *4-Year Cohort Graduation Rate Data, 2015-16*, <http://www.education.pa.gov/Data-and-Statistics/Pages/Cohort-Graduation-Rate.aspx>.

²⁶ Pennsylvania Department of Education, Pennsylvania Information Management System, *Enrollment Data, 2016-17*, <http://www.education.pa.gov/Data-and-Statistics/Pages/Enrollment%20Reports%20and%20Projections.aspx>.

²⁷ Pennsylvania Department of Education, Division of Data Quality, *Graduates Data, 2015-16*, <http://www.education.pa.gov/Data-and-Statistics/Pages/Graduates.aspx>.

²⁸ *Ibid.* Note that this percentage is based on self-reported, planned activities, not actual enrollments in postsecondary institutions.

Potential Solutions

A. Existing Initiatives

In its ESSA plan, PDE proposed implementing a “**K-12 Educator Pipeline**,” which would be a “statewide teacher recruitment initiative to encourage high school students to consider teaching as a profession.”²⁹ Under this proposal, PDE would (1) provide seed grants and technical assistance to secondary schools to support the implementation of curricula encouraging the exploration of teaching as a career, and (2) support the development of teaching academy magnet high schools across the commonwealth.³⁰ Both of these initiatives are aimed at “proactively promot[ing] the long-term development of a diverse and talented educator workforce for Pennsylvania.”³¹ Below, we discuss a number of concrete strategies that may inform how PDE could ensure the seed grants and teaching academies attract a diverse population of teacher candidates.

B. Promising Strategies



Target seed grants and technical assistance to schools with highly diverse student populations, and recruit students of color to attend teaching academies. This potential for strategic recruiting is implied in other sections of the ESSA Plan, where PDE mentions exploring “grow your own” educator programs in Pennsylvania’s “poorest and highest minority schools.”³² PDE could strengthen this effort by including grant application criteria that explicitly incentivize schools serving large proportions of students of color to apply.



Consider Boston Public Schools’ [High School to Teacher Program](#), which “identifies and cultivates culturally, linguistically, and racially diverse future educators that reflect the BPS student population, to return to BPS as highly qualified teachers.”³³ The program provides rising high school juniors with mentors, college prep courses, assistance with college costs, and teaching jobs in Boston Public Schools.³⁴ As of 2016, 87% of program participants were Black or Latinx.³⁵ This program could serve as a model for Pennsylvania LEAs with diverse student bodies that are looking to increase the number of teachers of color in their own teaching forces over the long term.



Join [Educators Rising](#), a national membership organization for aspiring teachers and their mentors comprised of more than 2,400 high schools and 43,000 students nationwide. The mission of Educators Rising is to “cultivat[e] highly skilled educators while guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession.”³⁶ While individual students or schools can join Educators Rising free of cost, Pennsylvania may consider joining 27 other states and regions as an official Educators Rising affiliate.³⁷ PDE or LEAs could also offer grants or otherwise subsidize the cost of the EdRising Academy Curriculum, which can be used as either a one- or two-year teacher preparation program for high school students.³⁸

²⁹ PA ESSA Plan (78).

³⁰ *Ibid.*

³¹ *Ibid.*

³² *Ibid.* (82-83)

³³ Boston Public Schools (BPS) High School to Teacher (HSTT) Program website, “Program Overview” webpage, <https://static1.squarespace.com/static/564f98c7e4b09897e64b404c/t/587faa31440243130a3e4911/1484761662298/BPS+HSTT+One+Page+Website+Version+1.pdf>.

³⁴ BPS HSTT website, <http://www.teachboston.org/become-a-teacher/bps-high-school-to-teacher-program/>.

³⁵ Office of Planning, Evaluation, and Policy Development, *The State of Racial Diversity in the Educator Workforce*, U.S. Department of Education, July 2016, <https://www2.ed.gov/rschstat/eval/highered/racial-diversity/state-racial-diversity-workforce.pdf>.

³⁶ Educators Rising website, <https://www.educatorsrising.org/>.

³⁷ Educators Rising website, “What We Offer: Overview” webpage, <https://www.educatorsrising.org/what-we-offer/overview>.

³⁸ Educators Rising website, “What We Offer: EdRising Academy Curriculum” webpage, <https://www.educatorsrising.org/what-we-offer/edrising-academy-curriculum>.

Spotlight on Innovative Practice

The Fellowship: Black Male Educators for Social Justice³⁹

The Fellowship: Black Male Educators for Social Justice is a nationally-renowned Philadelphia-based non-profit organization dedicated to increasing the number of Black male educators. The Fellowship started as an informal support group for Black male educators in the Philadelphia area, brought together by Sharif El-Mekki, principal at Mastery Charter School's Shoemaker campus. Beginning as a series of informal one-on-one meetings between local Black male educators, the organization steadily grew to monthly dinner meetings of 15-20 people. Soon the word spread, and the Fellowship hosted its first national convening in October 2017. Over 700 people from across the nation attended the inaugural national convening in Philadelphia, and the Fellowship now includes over 2,000 members. Recently, the Fellowship hired Vincent Cobb II—a community activist and education leader—as its first full-time staff member.

Mission and Activities

As articulated by its website address—1000x2025.org—the Fellowship's ultimate goal is to triple the number of Black male educators in Philadelphia by 2025. Though participants continue to use the Fellowship to discuss the range of challenges they face as Black male educators in professional development sessions, the organization's programming has expanded along with its membership.

The Fellowship's current programming includes the tri-annual Black Male Educators Convening (BMEC); the Purpose Career Fair and Protégé programs, aimed at recruiting both high school and college students into teaching; the DuBois award, which recognizes outstanding Black male educators across Greater Philadelphia's public schools; and the Agenda, the Fellowship's advocacy platform for policy change. Participants in BMEC also learn how to use their positions to identify promising young Black students in their schools and provide them with encouragement as they consider the teaching profession—something that many men in the Fellowship did not recall receiving from their teachers when they were young.

Impact in Philadelphia

After the Fellowship's first local convening in October 2015, Philadelphia School District Superintendent Dr. William Hite asked, "What's next, El-Mekki?" As El-Mekki explained, this push from Dr. Hite helped the organization do more, and with greater consistency, in partnership with the District. Kwame Floyd, the Director of Strategy and Operations for the School District of Philadelphia's Office of Talent, explained that the conversations ignited and led by the Fellowship have also pushed the District to take its own steps to investigate and address lagging teacher diversity.⁴⁰ This includes spending \$1.5 million to establish a teacher residency program, which brought in a majority-minority group of 20 teacher candidates in the 2017-18 school year, with plans to expand to 50 participants in the 2018-19 cohort.⁴¹

³⁹ Interview with Sharif El-Mekki, Feb. 6, 2018.

⁴⁰ Interview with Kwame Floyd, Feb. 7, 2018.

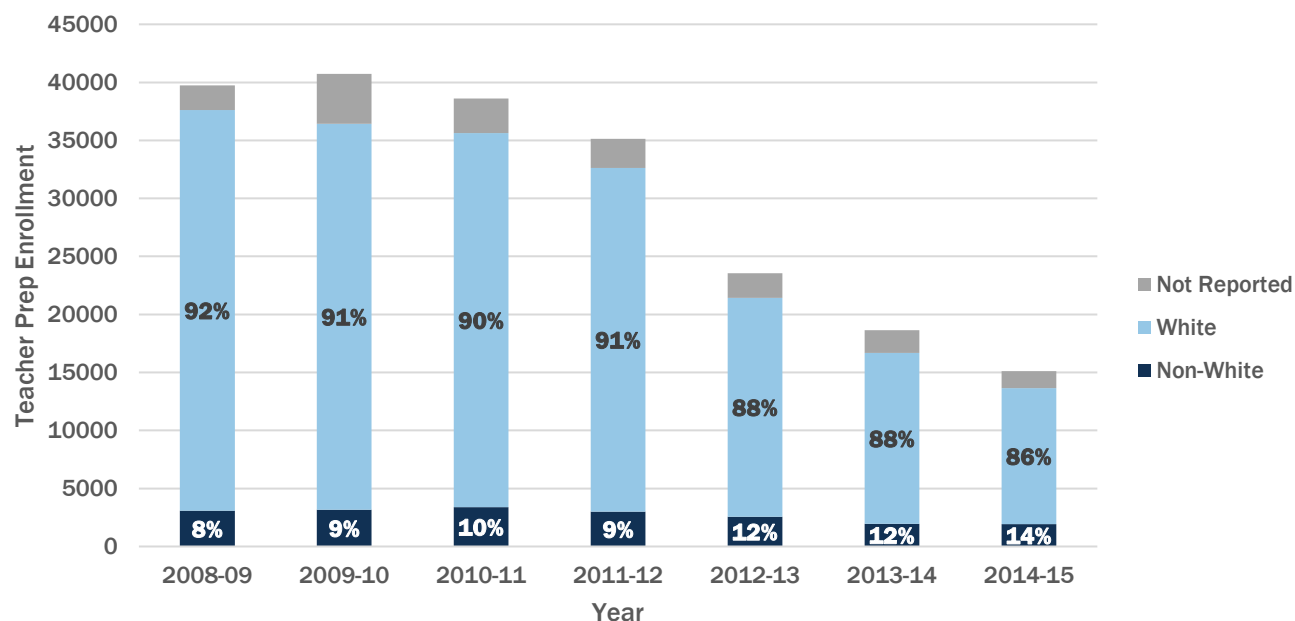
⁴¹ School District of Philadelphia website, "Teacher Residency Program" webpage, <https://jobs.philasd.org/teacher-residency/>. Profiles of the 20 teacher candidates are available here: <https://www.philasd.org/jobs/wp-content/uploads/sites/47/2017/08/Cohort-1-Resident-Profile-1.pdf>.

2. Teacher Preparation

Problem

Fewer students overall, including students of color, are enrolling in teacher preparation programs in Pennsylvania. Figure 4 depicts several problems in the teacher preparation section of the pipeline.

Figure 4. Pennsylvania Teacher Preparation Program Enrollment by Race



NOTE: Data on enrollment by race/ethnicity were not available for all teacher preparation programs. The percentages presented in the table are based on enrollment numbers among programs that reported enrollment disaggregated by race/ethnicity.

SOURCE: U.S. Department of Education, Office of Postsecondary Education, Higher Education Act Title II reporting system.

- Overall enrollment in teacher preparation programs has been decreasing since 2010-11. Although 114 educator preparation program providers offer 3,236 approved certification programs in Pennsylvania,⁴² statewide enrollments in all postsecondary teacher preparation programs have dropped by 63% in the last six reported years.⁴³ This decline mirrors nationwide trends, where, between 2009 and 2014, teacher enrollments dropped 35%, from 691,000 to 451,000.⁴⁴
- There has been a simultaneous decline in the number of students of color who enroll in teacher preparation programs. As shown in Figure 4 the *percentage* of enrollees of color has slightly increased; however, this masks the decrease in the overall *number* of enrollees of color. The number of enrollees of color peaked at 3,393 in 2010-11, but has since dropped to 1,925 in 2014-15.⁴⁵

⁴² Bureau of School Leadership and Teacher Quality, Office of Postsecondary & Higher Education, *Teacher Certifications and Projections* PowerPoint, Pennsylvania Department of Education, PASSHE Chief Academic Officers Meeting, Feb. 23, 2018, provided by PDE.

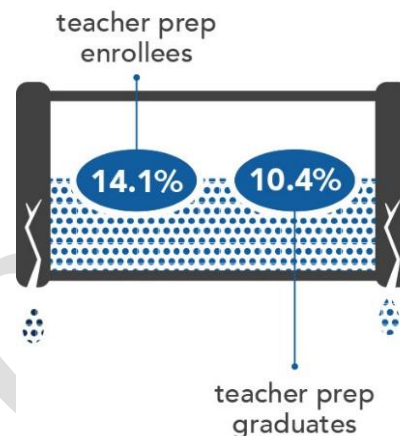
⁴³ HEA Title II reporting system. Enrollment in Pennsylvania teacher preparation programs dropped from 40,739 in 2009-10 to 15,124 in 2014-15. *Ibid.*

⁴⁴ Leib Satcher, Linda Darling-Hammond, and Desiree Carver-Thomas, *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.*, Learning Policy Institute, Sept. 2016, https://learningpolicyinstitute.org/sites/default/files/product-files/A_Coming_Crisis_in_Teaching_REPORT.pdf.

⁴⁵ HEA Title II reporting system.

- Teacher preparation programs at Pennsylvania’s historically black universities, Cheyney University and Lincoln University, have significantly contracted. As of 2018, each of these institutions offers teacher preparation for only two certificates—Prek-4 and Prek-8 Special Education.⁴⁶ Given that these institutions are a natural pathway to the teaching profession for students of color, the fact that they offer so few preparation programs could further constrict the teacher pipeline for students of color.
- Leaks persist for students who enroll. As of 2014-15, 14.1% of students enrolled in teacher preparation programs were people of color. However, only 10.4% of the graduates of those same programs were people of color.⁴⁷

Figure 5. Pennsylvania Teachers of Color Pipeline: Teacher Preparation Programs



Potential Solutions

A. Existing Initiatives

In its ESSA Plan, PDE proposed the **Paraprofessionals Pathway Program** to tap into an already-existing pool of diverse potential teachers—paraprofessionals currently working in schools. PDE plans to use available Title II, Part A funding to encourage partnerships between educator preparation programs and LEAs to develop pathways into classroom teaching for paraprofessionals, a population that research suggests is “more likely to be diverse and multilingual than classroom teachers.”⁴⁸ Below, we discuss models that PDE could consider when implementing this program as well as promising state- and university-level strategies to address potential leaks at the teacher preparation stage of the pipeline.

B. Promising Strategies



Consider designing a program like the University of Colorado Denver’s [Pathways2Teaching](#), which is “designed to encourage high school students of color to explore the teaching profession as a viable career choice by viewing the work of teachers as an act of social justice.”⁴⁹ This concurrent enrollment program for 11th and 12th grade students allows them to earn college credit while exploring teaching as a potential career choice.⁵⁰ Pathways2Teaching has served hundreds of students in the Denver metro area since 2010, and the program has been replicated, in collaboration with faculty from Eastern Oregon University, across three rural school districts serving predominantly Latinx and Native American communities.⁵¹

⁴⁶ Pennsylvania Department of Education, *Approved Certification Programs*, April 9, 2018, <http://www.education.pa.gov/Documents/Teachers-Administrators/Certification%20Preparation%20Programs/Approved%20Certification%20Programs.pdf>.

⁴⁷ HEA Title II reporting system, 2014-15.

⁴⁸ PA ESSA Plan (78) (citing Conor P. Williams, Amaya Garcia, Kaylan Connally, Shayna Cook, and Kim Dancy, *Multilingual Paraprofessionals: An Untapped Resource for Supporting American Pluralism*, New America, June 2016 https://naproduction.s3.amazonaws.com/documents/DLLWH_ParasBrief6.1.pdf).

⁴⁹ Larry Ferlazzo, *Response: Strategies for Recruiting Teachers of Color*, Education Week Blog, Sept. 16, 2015, http://blogs.edweek.org/teachers/classroom_qa_with_larry_ferlazzo/2015/09/response_strategies_for_recruiting_teachers_of_color.html.

⁵⁰ Pathways2Teaching webpage, <http://www.pathways2teaching.com/>.

⁵¹ Ferlazzo.

**Create financial incentives for students of color to enroll in teacher preparation programs.**

Oregon,⁵² Wisconsin,⁵³ and Florida⁵⁴ have each created scholarships for students of color enrolling in education preparation programs. These programs generally provide scholarship funding for in-state tuition in return for an agreement to teach in the state for a certain number of years.



Develop diversity standards for educator preparation. Through state legislation, Rhode Island began an extensive information-gathering process in 2011 that culminated in new standards that hold teacher preparation programs accountable for improving the diversity of their enrollees. These standards emphasize both more rigorous academic standards and increased teacher diversity.⁵⁵



Set diversity goals and intentionally seek out diverse candidates. Both of these practices helped Teach for America (TFA) diversify its corps from 29% people of color in 2008 to 50% in recent years, while maintaining an acceptance rate of about 15%.⁵⁶ To do so, TFA's recruitment team set goals to increase the number of face-to-face interactions and began proactively meeting with candidates from many backgrounds to begin building relationships, rather than waiting for potential candidates to come to them. The organization also frequently seeks input from current corps members of color to ensure that TFA is a place where people of color feel comfortable and welcome.⁵⁷ Many of these practices would be replicable by teacher preparation programs in Pennsylvania. As discussed in the "Teaching: Hiring and Retention" section below, these hiring initiatives may benefit from the use of a cohort model when hiring diverse teachers.



Create more teacher residency programs. Teacher residency programs are based on a medical residency model, in which a teaching resident works in a classroom alongside a mentor teacher for a full academic year while taking graduate classwork from a partner university.⁵⁸ As PDE has indicated, residency programs can be used to encourage more diversity in the teaching workforce; in 2015-16, 45% of teacher residents nationally were people of color.⁵⁹

⁵² Enrolled Senate Bill 182, 79th Oregon Legislative Assembly–2017 Regular Session, <https://olis.leg.state.or.us/liz/2017R1/Downloads/MeasureDocument/SB182>.

⁵³ *Financial Aid Programs*, State of Wisconsin Higher Educational Aids Board, <http://www.heab.state.wi.us/programs.html#MTL>.

⁵⁴ Office of Student Financial Assistance, *Minority Teacher Education Scholars Program Florida Fund for Minority Teachers, Inc. – Fact Sheet*, Florida Department of Education, 2017-18, <http://www.floridastudentfinancialaid.org/SSFAD/factsheets/FFMT.pdf>.

⁵⁵ Rhode Island Standards for Educator Preparation, 2013, http://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Certification/PrePRI/RIPA_Standards_2013.pdf. For a more in-depth overview of Rhode Island's efforts to increase teacher diversity and certification standards, see Lisette Partelow, Angie Spong, Catherine Brown, and Stephenie Johnson, *America Needs More Teachers of Color and a More Selective Teaching Profession*, Center for American Progress, Sept. 14, 2017, <https://www.americanprogress.org/issues/education-k-12/reports/2017/09/14/437667/america-needs-teachers-color-selective-teaching-profession/>.

⁵⁶ Carolyn Phenice, *New Research: Hiring More Teachers of Color and Raising the Teacher Hiring Bar Not Mutually Exclusive*, Sept. 2017, <https://www.the74million.org/article/new-research-hiring-more-teachers-of-color-and-raising-the-teacher-hiring-bar-not-mutually-exclusive/>.

⁵⁷ Partelow, Spong, Brown, & Johnson.

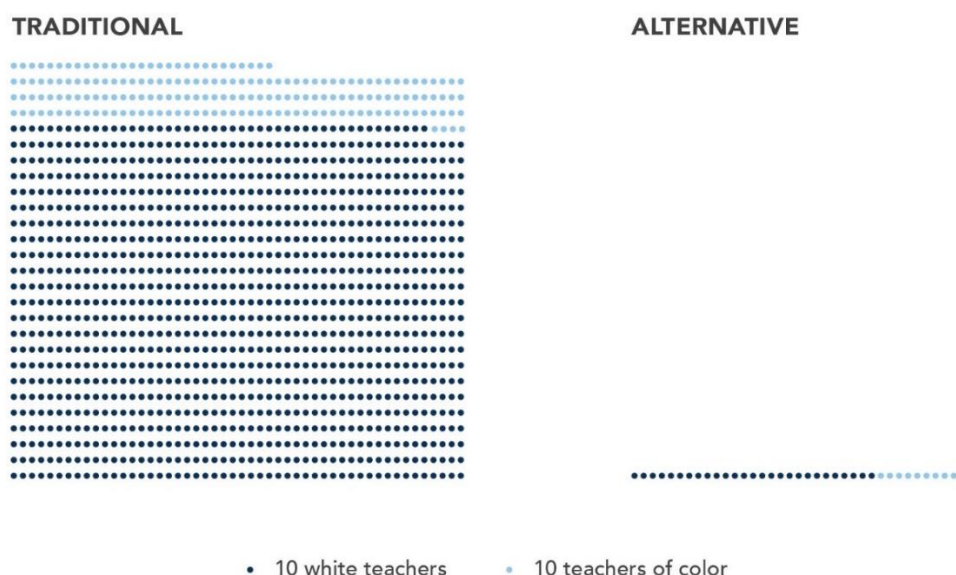
⁵⁸ Roneeta Guha, Maria E. Hyler, and Linda Darling-Hammond, *The Teacher Residency: An Innovative Model for Preparing Teachers*, Learning Policy Institute, Sept. 2016, https://learningpolicyinstitute.org/sites/default/files/product-files/Teacher_Residency_Innovative_Model_Preparing_Teachers_REPORT.pdf.

⁵⁹ *Ibid*; Pennsylvania Department of Education, *The Framework Residency Certificate: Specific Program Guidelines*, <http://www.education.pa.gov/Documents/Teachers-Administrators/Certification%20Preparation%20Programs/Framework%20Guidelines%20and%20Rubrics/The%20Framework%20Residency%20Certificate%20Specific%20Program%20Guidelines.pdf>.

Teachers of Color & Alternative Certification in Pennsylvania

In Pennsylvania, 97% of all teacher preparation students are enrolled in traditional programs; the remaining 3% are enrolled in alternative certification programs.⁶⁰ The major difference between alternative and traditional teacher certification is that alternative route candidates complete teacher preparation after earning a bachelor's degree, while most traditional teacher candidates complete teacher preparation as part of a bachelor's degree. Although far fewer people enroll in alternative certification programs, these programs enroll higher proportions of people of color than traditional teacher preparation programs.⁶¹ In 2015, 87% of teacher preparation programs reported enrollment disaggregated by race.⁶² Of those, 14% of teacher prep candidates in traditional programs were people of color, compared to 27% in alternative certification programs.⁶³

Figure 6. Diversity of Pennsylvania's Teacher Preparation Program Enrollees by Program Type.



NOTE: Data on enrollment by race/ethnicity were not available for all teacher preparation programs. The numbers presented in the table are based on enrollment numbers among programs that reported enrollment disaggregated by race/ethnicity.

NOTE: "Teachers of color" includes all populations that are not reported as white, including African American, Asian, American/Alaskan Native, Hispanic, Pacific Islander, and multi-racial populations.

SOURCE: U.S. Department of Education, Office of Postsecondary Education, Higher Education Act Title II reporting system, 2014-15.

Notably, commentators have raised concerns about the quality of alternative certification programs in Pennsylvania.⁶⁴ Additionally, because such a small percentage of enrollees go through alternative certification programs, it may be impractical to rely on alternative certification to close the teacher representation gap on a system-wide scale.

⁶⁰ HEA Title II reporting system, 2014-15.

⁶¹ In Pennsylvania's teacher preparation programs, the majority of enrollees of color are African American (46%) or Hispanic (23%). Enrollment by race/ethnicity also varies by program type. African Americans account for a larger percentage of the total enrollment of color in alternative certification programs (61%) than in traditional programs (45%), while Hispanics represent a greater percentage of traditional program enrollment (23%) than alternative program enrollment (13%). *Ibid.* These percentages are based on enrollment numbers among programs that reported enrollment disaggregated by race.

⁶² HEA Title II reporting system, 2014-15.

⁶³ *Ibid.*

⁶⁴ National Council on Teacher Quality, 2014 *NCTQ Teacher Prep Review: Findings on Secondary Alternative Certification Programs*, Revised Feb. 2015, https://www.nctq.org/dmsView/Teacher_Prep_Review_2014_Report (giving Pennsylvania's American Board for Certification of Teacher Excellence a "D" grade).

3. Teacher Certification

Generally, to qualify for teacher certification in Pennsylvania, prospective teachers who do not yet have a bachelor's degree must pass certification tests in (1) basic skills (formerly Praxis I)⁶⁵ and (2) general knowledge, professional knowledge, and subject area knowledge (Praxis II).⁶⁶

Problem

The total number of instructional certificates issued by PDE in recent years has been steadily decreasing, but publicly reported data on this section of the pipeline is not disaggregated by race:

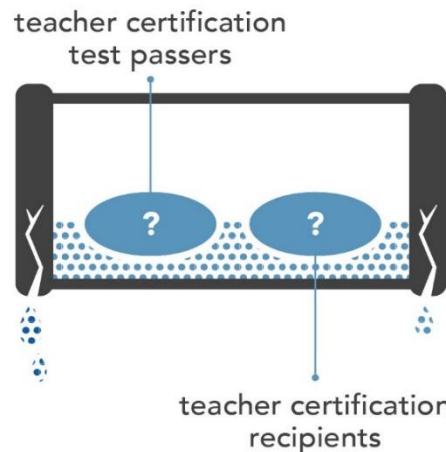
- PDE has issued fewer instructional certificates each year for the last several years. Between 2011-12 and 2015-16 alone, the number of Instructional I certificates issued dropped over 50%, from 16,614 to 8,271.⁶⁷
- PDE does not report the racial demographics of certification test-taking or passing rates. Without public data, we cannot examine whether the teacher diversity gap is exacerbated at this stage of the pipeline.

Nationally, large pass rate gaps have been reported between white test takers and test takers of color:

- For the Praxis I mathematics test, the pass rate gap between African American and white test takers is 41%. The same two groups have a pass rate gap of 49% for the General Science: Content Knowledge Praxis II.⁶⁸
- Somewhat lower pass rate gaps exist for both tests between white test takers and Hispanic, Asian, and Native American test takers as well.

Given the likelihood that similar gaps may exist in many of Pennsylvania's teacher preparation programs, in the next section, we discuss a range of potential strategies to address those gaps.

Figure 7. Pennsylvania Teachers of Color Pipeline: Teacher Certification



⁶⁵ Starting in March 2016, candidates may combine reading, writing, and mathematics scores from different test providers to meet the basic skills requirement. Tests allowed include ACT, CORE Academic (ETS Praxis Core), Pre-Service Academic Performance Assessment (PAPA) (administered by Pearson), SAT, PPST (Praxis I) (legacy test – from 2012 or before). Additionally, old and new tests may be combined. PDE provides a calculator to help determine whether a candidate's combined tests scores meet the requirements. Certification Test and Score Requirements Excel and Composite Score Calculator Excel available at <http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx>.

⁶⁶ Pennsylvania Department of Education, *Certification Testing*, <http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx>; Educational Testing Service, *Overview of Pennsylvania Testing Requirements*, <https://www.ets.org/praxis/pa>.

⁶⁷ Pennsylvania Department of Education, *Pennsylvania's Partnerships for Innovative Troops to Teachers Program to Expand Pennsylvania's Teacher Workforce in Subject Shortage Areas* webinar PowerPoint, Aug. 2, 2017 (slide 20), available at <http://www.education.pa.gov/Teachers%20-%20Administrators/Teacher%20Quality/Pages/Pennsylvania-Troops-to-Teachers-Grant.aspx>.

⁶⁸ Linda Tyler, Brooke Whiting, Sarah Ferguson, Segun Eubanks, Jonathan Steinberg, Linda Scatton, and Katherine Bassett, *Toward Increasing Teacher Diversity: Targeting Support and Intervention of Teacher Licensure Candidates*, Educational Testing Service and National Education Association, 2010, https://www.ets.org/s/education_topics/teaching_quality/pdf/support_intervention_teacher_licensure.pdf.

Potential Solutions

A. Existing Initiatives

Importantly, Pennsylvania already allows certification candidates to use combined scores for the basic skills test and provides flexibility for pass scores in light of students' GPAs in their certification area.⁶⁹ This flexibility provides multiple options for teacher candidates to demonstrate the necessary competence in the basic skills required to be a successful teacher.

B. Promising Strategies



Make demographic information on certification test-taking and passage rates publicly available. This information should be provided at both the state and certification program level so that researchers and others interested in examining these rates have access to the necessary data.



The state legislature could **mandate the collection of relevant data and sponsor a study of the teacher certification portion of the state's teacher pipeline in an effort to identify specific leaks.** The teacher certification portion of the pipeline is the most lacking in reported data, so any potential leaks will likely remain unidentified without such an initiative.



Consider expanding out-of-state certification reciprocity. Although Pennsylvania is a participant in the National Association of State Directors of Teacher Education and Certification (NASDTEC) Interstate Agreement,⁷⁰ the agreement does not grant full reciprocity between Pennsylvania and other states that are signatories of the agreement given current state law. There are Pennsylvania statutes that make it easier for some out-of-state certified educators to become certified in Pennsylvania, but even those out-of-state candidates that meet the statutory experience requirements must take the approved Pennsylvania content tests.⁷¹ Making it easier for teachers credentialed out of state to earn Pennsylvania certification may allow the Commonwealth to pull in teachers from areas with a higher number of teachers of color and to tap into the over 40% of former teachers who cite certification reciprocity issues as a barrier to returning to the classroom.⁷²

4. Teaching: Hiring and Retention

The final section of the pipeline consists of both recruiting and retaining teachers of color.

Problem

Data on the racial demographics of teacher hiring and retention in Pennsylvania are not publicly reported. While LEAs across the state are required to report these data to PDE, the agency does not make them publicly available. We do know that, nationally, teachers of color leave the profession at a higher rate than

⁶⁹ Candidates completing a program in their certification area may use the qualifying scores associated with their GPA, which are lower than passing scores. Additionally, if a graduate's GPA is between 2.80-2.99, they can still be certified if they achieve the related qualifying score, which is higher than the passing score. Pennsylvania Department of Education, *Basic Skills and Content Test Webinar*, Apr. 5, 2017, available at <http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certification-Testing.aspx>.

⁷⁰ NASDTEC website, "Interstate Agreement" webpage, <http://www.nasdtec.net/?page=interstate>.

⁷¹ Pennsylvania Department of Education website, "Out of State" webpage, <http://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pennsylvania%20Certification/Pages/Out-of-State.aspx>; Education Commission of the States, *Teacher License Reciprocity: State Profile – Pennsylvania*, <http://ecs.force.com/mbdata/mbstcprofancw?rep=TCL17ST&st=Pennsylvania>.

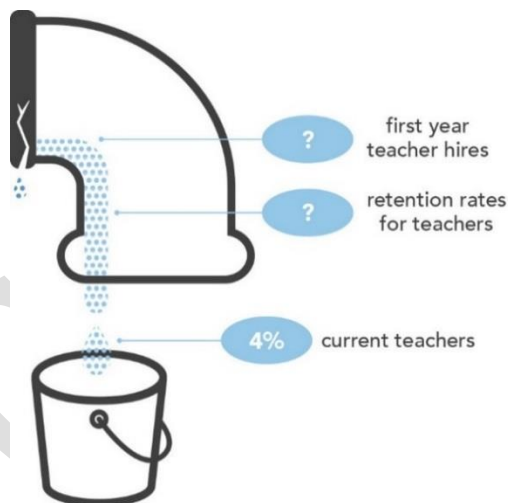
⁷² Anne Podolsky, Tara Kini, Joseph Bishop, and Linda Darling-Hammond, *Solving the Teacher Shortage: How to Attract and Retain Excellent Educators*, Sept. 2016, https://www.learningpolicyinstitute.org/sites/default/files/product-files/Solving_Teacher_Shortage_Attract_Retain_Educators_REPORT.pdf.

white teachers,⁷³ and research indicates that, for teachers of color, retention is a bigger issue than recruitment.⁷⁴

Researchers have identified poor working conditions as one of the main explanations for the lower retention of teachers of color. Specifically:

- Teachers cite a lack of classroom autonomy and input into school-level decisions as a reason for leaving.⁷⁵
- Additionally, because they are disproportionately represented in high-poverty, urban schools,⁷⁶ teachers of color often experience the difficult working conditions associated with poorly-funded public education systems, including lower salaries, larger class sizes, limited instructional resources, school safety concerns, low student achievement, and high rates of discipline problems.⁷⁷

Figure 8. Pennsylvania Teachers of Color Pipeline: Teaching – Hiring & Retention



Potential Solutions

A. Existing Initiatives

In its ESSA plan, PDE proposed creating a **statewide “educator clearinghouse”** for teacher hiring. Specifically, PDE plans to use Title II, Part A funds to expand the current functionality of the state’s Teacher Information Management System (TIMS) to create a forum for statewide hiring. According to PDE, the educator clearinghouse would serve as a “streamlined one-stop shop to connect credentialed educators with open positions in the commonwealth” and would “match self-identified credentialed teachers interested in employment opportunities with real-time data on openings by certification provided by LEAs across the commonwealth.”⁷⁸ In the next “Promising Strategies” section, we discuss how this educator clearinghouse could be implemented to maximize teacher diversity efforts in Pennsylvania.

Additionally, PDE has already pledged to (1) support initiatives like The Fellowship: Black Male Educators for Social Justice (see call out box on pages 3-4) that support the recruitment and retention of teachers of color and (2) implement a statewide network aimed at increasing and retaining a large number of teachers of color throughout Pennsylvania through a competitive grant program.⁷⁹

⁷³ Richard Ingersoll and Henry May, *Minority Teacher Recruitment, Employment, and Retention: 1987 to 2013*, Learning Policy Institute, Sept. 15, 2016, https://learningpolicyinstitute.org/sites/default/files/product-files/Minority_Teacher_Recruitment_REPORT.pdf (reporting that, from 1987 to 2012, “minority teachers tended to have higher rates of turnover than nonminority teachers”).

⁷⁴ Richard Ingersoll and Henry May, *Recruitment, Retention and the Minority Teacher Shortage*, Consortium for Policy Research in Education, Sept. 2011, http://repository.upenn.edu/gse_pubs/226.

⁷⁵ Ingersoll & May, *Minority Teacher Recruitment, Employment, and Retention: 1987 to 2013*.

⁷⁶ *Ibid.*

⁷⁷ Genda L. Partee, *Retaining Teachers of Color in Our Public Schools*, Center for American Progress, June 28, 2014, <https://www.americanprogress.org/issues/education/reports/2014/06/28/91962/retaining-teachers-of-color-in-our-public-schools/>.

⁷⁸ PA ESSA Plan (70-71).

⁷⁹ PA ESSA Plan (83).

B. Promising Strategies



Study the transition from certification to school placement to identify any potential leaks. In Illinois, one study of the teacher pipeline found that an often-overlooked problem was the transition from teacher certification to employment: “[m]ore than half of the remaining pool of prospective teachers is lost at this transition point, including broad swaths of academically skilled students from all racial/ethnic groups.”⁸⁰ Overlooked “leaks” may exist in Pennsylvania’s pipeline, but more extensive data reporting and research would be required to locate them.



Require public reporting of the demographics of (1) teacher applicants at the state, LEA, and school level, and (2) teacher retention rates at the school level. LEAs currently report racial demographic data on their teacher workforce quarterly and annually to PDE, as well as other data points, such as years of experience and years in the LEA, that would allow for some analysis of the demographics of teacher hiring and retention rates. However, LEAs do not report demographic information about teacher applicants, nor do they report data to allow measurement of school-level retention rates by race. In addition, PDE has not historically included the teacher diversity data it receives from LEAs in its own public data reports. Collecting and reporting these data would enable an analysis of applicant and hiring patterns at the state, LEA, and school level in Pennsylvania, and would also allow researchers to determine whether teachers of color (or a sub-set of those teachers) are leaving schools at disproportionately higher rates than their white colleagues.



Allow LEAs with less diverse teaching staffs to use the statewide educator clearinghouse to identify and recruit qualified teacher candidates of color. As noted in the introduction, a diverse teaching force benefits all students. For this reason, even LEAs with relatively low proportions of non-white students should consider strategies to diversify their staff. LEAs hiring teachers of color may want to consider **using a cohort model, where teachers of color are placed in schools together**, rather than recruiting individual teachers of color to predominately white teaching staffs. Research indicates that teachers of color working as part of a larger group in a school may be more likely to stay long-term.⁸¹



Work with The Fellowship as a strategic partner in the creation of PDE’s proposed statewide teacher network. (See The Fellowship call out box on pages 3-4.) Researchers recommend creating professional networks for teachers of color as a way of improving retention,⁸² and The Fellowship provides one model for practitioners in other areas of Pennsylvania to create networks of support for teachers of color. Moreover, the Fellowship’s close relationship with the School District of Philadelphia could be emulated with the efforts of like-minded and proactive educators and administrators in other Pennsylvania LEAs.



Proactively seek out teachers of color during the hiring process, and encourage principals to do the same when they have control over hiring.⁸³ LEAs can also **include teachers of color** who already serve in their schools as active partners in developing and enacting strategies to hire more

⁸⁰ Bradford R. White, Karen J. DeAngelis, and Eric J. Lichtenberger, *The Student Has Become the Teacher: Tracking the Racial Diversity and Academic Composition of the Teacher Supply Pipeline*, Illinois Education Research Council, 2013, https://ierc.education/ierc_publications/the-student-has-become-the-teacher-tracking-the-racial-diversity-and-academic-composition-of-the-teacher-supply-pipeline-2013-3/.

⁸¹ Travis J. Bristol, *To Be Alone or in a Group: An Exploration Into How the School-Based Experiences Differ for Black Male Teachers Across One Urban School District*, Urban Education, Mar. 14, 2017, <http://journals.sagepub.com/doi/pdf/10.1177/0042085917697200>.

⁸² Nicole S. Simon, Susan Moore Johnson, and Stefanie K. Reinhorn, *The Challenge of Recruiting and Hiring Teachers of Color: Lessons From Six High-Performing, High-Poverty, Urban Schools*, Harvard Graduate School of Education, The Project on the Next Generation of Teachers, July 2015, https://projectnxt.gse.harvard.edu/files/gse-projectnxt/files/the_challenge_of_recruiting_and_hiring_teachers_of_color_diversity_july_2015.pdf.

⁸³ Samaria Bailey, *Black male educators make up 31 percent of Bethune Elementary staff*, Philadelphia Tribune, Jan. 24, 2018, http://www.phillytrib.com/news/black-male-educators-make-up-percent-of-bethune-elementary-staff/article_1e2ebef4-a4c1-53a6-b49f-dd9a74e6b999.html.

teachers of color.⁸⁴ **PDE could consider providing a hiring toolkit to assist LEA and school administrators.** Delaware’s Department of Education has developed a comprehensive “[Teacher Recruitment and Selection Toolkit](#)” for district and school administrators and staff to improve their hiring practices, with an emphasis on recruiting teachers of color.⁸⁵ The toolkit includes strategies such as involving current teachers of diverse races/ethnicities in recruitment planning, and potential interview questions regarding applicants’ experience working with students from culturally diverse backgrounds.



LEAs intent on increasing teacher diversity can **improve working conditions for teachers.** Specifically, LEAs could begin **training principals** to improve retention rates by adopting research-based effective leadership behaviors such as creating a strong school mission and vision, prioritizing trust and respect, and involving teachers in decision making.⁸⁶ LEAs could also provide cultural competence training for all teachers, administrators, and central office personnel who support schools;⁸⁷ invest in training principals and teachers to engage in difficult dialogue about issues of race and equity; and build greater awareness regarding what is known about how teachers of color experience working in their schools.⁸⁸ Finally, LEAs could take advantage of several state-run programs, like the Pennsylvania Inspired Leadership (PIL) program⁸⁹ and the Superintendents’ Academy,⁹⁰ where PDE reports it is prioritizing this kind of training.

Improving Data Quality Throughout the Teacher Pipeline

As noted throughout this brief, publicly available information regarding diversity is missing at several points along the teacher pipeline. Wide access to these data is necessary to engage a broad range of stakeholders in LEA and statewide efforts to strengthen the pipeline for teachers of color.



Several states now requiring **improved reporting on teacher diversity** could serve as models to Pennsylvania lawmakers:

- [Oregon’s Educators Equity Act](#) requires an annual report on the state of educator equity.⁹¹
- Similarly, [Colorado’s H.B. 1175](#) requires the state’s Department of Education to prepare a report on statewide and district teacher demographics, as well as recommendations for improvement.⁹²
- In Connecticut, [Public Act No. 15-108](#) established a task force and requires an annual report on teacher candidate demographics in teacher prep programs.⁹³

⁸⁴ Diana D’Amico, Robert J. Pawlewicz, Penelope M. Earley, and Adam P. McGeehan, *Where Are All the Black Teachers? Discrimination in the Teacher Labor Market*, Harvard Educational Review, Spring 2017, <http://hepgjournals.org/doi/pdf/10.17763/1943-5045-87.1.26>.

⁸⁵ Delaware Department of Education, Teacher and Leader Effectiveness Branch, *Teacher Recruitment and Selection Toolkit*, 2016, https://www.doe.k12.de.us/cms/lib/DE01922744/Centricity/Domain/455/Recruitment%20and%20Selection%20Toolkit_2016.pdf.

⁸⁶ Universal Council for Educational Administration, *Policy Brief 2018-2: The Role of Principals in Reducing Teacher Turnover and the Shortage of Teachers*, Jan. 2018, <http://3fi71l2qoj4l3y6ep2tqpwwa.wpengine.netdna-cdn.com/wp-content/uploads/2018/01/UCEA2018-2PB-PrincipalsInfluenceTeacherTurnoverFINAL2.pdf>.

⁸⁷ EdNext Podcast, Ep. 63, *School Suspensions and Teacher Race*, Dec. 7, 2016, <https://soundcloud.com/education-next/ep-63-dec-7-2016-racial-disparities-and-school-discipline>. See also, Constance A. Lindsay and Cassandra M. D. Hart, *Teacher Race and School Discipline*, Education Next, Winter 2017, <http://educationnext.org/teacher-race-and-school-discipline-suspensions-research/>.

⁸⁸ Nicole S. Simon, Susan Moore Johnson, and Stefanie K. Reinhorn, *The Challenge of Recruiting and Hiring Teachers of Color: Lessons From Six High-Performing, High-Poverty, Urban Schools*, Harvard Graduate School of Education, The Project on the Next Generation of Teachers, July 2015, https://projectnxt.gse.harvard.edu/files/gse-projectnxt/files/the_challenge_of_recruiting_and_hiring_teachers_of_color_diversity_july_2015.pdf.

⁸⁹ Pennsylvania Department of Education, “PA Inspired Leaders” webpage, <http://www.education.pa.gov/teachers%20-%20Administrators/pa%20inspired%20leaders/pages/default.aspx>.

⁹⁰ Pennsylvania Pressroom, *Pa. Department of Education Launches First Superintendent’s Academy*, May 17, 2016, <http://www.media.pa.gov/Pages/education-Details.aspx?newsid=229>.

⁹¹ Oregon’s Chief Education Office, *2016 Oregon Educator Equity Report*, http://tspc.oregon.gov/publications/EducatorEquityReport_CEEO_July_2016.pdf.

⁹² See also Augenblick, Palaich and Associates, *Keeping Up with the Kids: Increasing Minority Teacher Representation in Colorado*, Executive Summary, Dec. 16, 2014, <https://www.cde.state.co.us/fedprograms/minority-teacher-recruitment-executive-summary>.

⁹³ Connecticut Public Act No. 15-108.

Missing Pipeline Data Points

Specific recommendations for data points that could be collected and reported annually include:

Teacher preparation programs (pre- and post-baccalaureate)

- Number of students indicating an intention to complete a certification program by race
- Enrollees by race, at both the beginning and end of preparation program
- Teacher certification test takers by race
- Teacher certification test passers by race

Pennsylvania Department of Education

- Teaching certifications granted by race each year
- New teacher applicants by race at school/LEA/statewide level
- New teacher hires by race at school/LEA/statewide level
- Years in the teaching field by race at school/LEA/statewide level
- Years in LEA by race each year at school/LEA/statewide level



PDE does not need to wait for legislative action, as many indicators are already available to the Department. For example, PDE reports professional staffing at all schools that includes each teacher's name, gender, salary, degree, and years of experience.⁹⁴ PDE could also **report the racial demographics of each school's teaching staff that it already collects from LEAs**. In particular, for the 2018-19 school year, PDE is launching its new [Future Ready PA Index](#) and could **consider including a teacher diversity measure**. The inclusion of such a measure would require LEAs to report missing pipeline data describing teacher retention rates by race at the school level, which could provide valuable insight into where LEAs and PDE should focus their efforts.



There may also be an opportunity for **better reporting in Pennsylvania's federally mandated "State Plan for Ensuring Equitable Access to Excellent Educators for All Students."**⁹⁵ PDE's current Teacher Equity Plan includes only limited discussion of teacher diversity, but the addition of teacher demographic metrics to already-required data reporting would likely not be burdensome. Alternatively, **individual LEAs that do not already do so could begin publicly reporting and analyzing their data themselves**, regardless of any particular mandate from PDE.



After instituting better data reporting on teacher diversity, **policymakers, PDE, and LEAs should consider setting specific, measurable goals for improving teacher diversity**. For example, Mississippi's Department of Education set a goal in its ESSA Plan to increase the number of teachers of color in what it calls "critical shortage school districts"—districts with large populations of students of color and low-income students, as well as higher teacher attrition rates.⁹⁶ Mississippi's goal is to increase the number of teachers of color in these districts by 25% by 2025, which would result in a percentage increase from 53% to 67%. In addition to these efforts, Mississippi is one of six states where state education officials are working to increase the number of teachers of color by 2020.⁹⁷ Setting specific goals may help increase buy-in and support from a range of stakeholders.

⁹⁴ Pennsylvania Department of Education. *Professional Personnel Individual Staff Report*, 2016-17, <http://www.education.pa.gov/Data-and-Statistics/Pages/Professional-and-Support-Personnel.aspx>.

⁹⁵ Pennsylvania Department of Education, *Pennsylvania's State Plan for Ensuring Equitable Access to Excellent Educators for All Students*, June 1, 2015, <https://www2.ed.gov/programs/titleiparta/equitable/paequityplan081915.pdf>.

⁹⁶ Mississippi Consolidated State Plan, Mississippi Department of Education, Sept. 17, 2017, http://www.mdek12.org/docs/state-superintendent/essa-consolidated-state-plan-2017-09-14-signed_20170920140640_133684.pdf?sfvrsn=2.

⁹⁷ Lauren Camera, *States to Priorities Hiring Teachers of Color*, U.S. News & World Report, Mar. 28, 2018, <https://www.usnews.com/news/education-news/articles/2018-03-28/states-to-prioritize-hiring-teachers-of-color>.

Conclusion

Research indicates that all students benefit from a diverse teaching staff, but teachers of color are particularly important to the success and well-being of students of color. Unfortunately, the gap between the diversity in Pennsylvania's student population and its teaching force is among the largest in the country. As Pennsylvania's population continues to become more diverse, it is crucial that the state legislature, PDE, teacher preparation programs, and LEAs across the Commonwealth act proactively to build a teaching workforce that better represents its students.

PDE's ESSA Plan contains several avenues that can be leveraged to increase teacher diversity, and its recent attention to reporting and analysis of teacher preparation and current teacher data is also an important step in the right direction. By executing those initiatives and adopting additional strategies outlined in this brief, Pennsylvania can make meaningful progress in increasing diversity with relatively small investments.

More comprehensive repairs to the teacher pipeline in Pennsylvania will require a coordinated effort across high schools, teacher preparation programs, LEAs, and the state. Such reforms will also, inevitably, require dedicated and meaningful resources. However, making these commitments would put Pennsylvania on track to building a teacher workforce that reflects its increasingly diverse student population—a transformation that would benefit all students.

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ⁱ Gershenson, Seth, Stephen B. Holt, and Nicholas W. Papageorge, Who Believes in Me? The Effect of Student-Teacher Demographic Match on Teacher Expectations, *Economics of Education Review* 52, June 2016, <https://doi.org/10.17848/wp15-231>.

ⁱⁱ Ana Maria Villegas and Jacqueline Jordan Irvine, Diversifying the Teaching Force: An Examination of Major Arguments, *Urban Review*, Apr. 16, 2010 (181-82) (detailing (1) five studies looking at effects of racially-paired teachers and students, with only one reporting no academic benefits for students of color; (2) three studies finding positive academic affects for students of color in schools with a diverse teacher population; and (3) seven studies reporting positive results when looking at effects of teachers of color on student outcomes other than test scores, like absenteeism, placement in special education, admission to gifted programs, suspension and expulsion rates, dropout rates, and college-going rates); Anna J. Egalite, Brian Kisida, and Marcus A. Winters, Representation in the classroom: The effect of own-race teachers on student achievement, *Economics of Education Review*, April 2015, <https://www.sciencedirect.com/science/article/abs/pii/S0272775715000084>.

ⁱⁱⁱ Constance A. Lindsay and Cassandra M. D. Hart, Teacher Race and School Discipline, *EducationNext*, Winter 2017 / Vol. 17, No. 1, <http://educationnext.org/teacher-race-and-school-discipline-suspensions-research/>.

^{iv} Seth Gershenson, Cassandra M. D. Hart, Constance A. Lindsay, and Nicholas A. Papageorge, The Long-Run Impacts of Same-Race Teachers, Institute of Labor Economics, Mar. 2017, <http://ftp.iza.org/dp10630.pdf> (finding that assigning a Black male 3rd–5th grader to a Black teacher significantly reduces the probability that he drops out of high school—particularly among the most economically disadvantaged Black males—and that exposure to at least one Black teacher in grades 3–5 increases the likelihood that persistently low-income students of both sexes aspire to attend a four-year college). See also Villegas & Irvine.

^v Jasmin Cloutier, Tianyi Li, and Joshua Correll, The Impact of Childhood Experience on Amygdala Response to Perceptually Familiar Black and White Faces, *Journal of Cognitive Neuroscience*, 2014, <http://ifsnlab.org/wp-content/uploads/2016/09/Cloutier-2014b.pdf> (finding, through neurological research, support for the idea that “greater exposure to Black individuals early in life” may help reduce racial bias).

^{vi} Hua-Yu Sebastian Cherng and Peter F. Halpin, The Importance of Minority Teachers: Student Perceptions of Minority Versus White Teachers, *Educational Researcher*, October 2016; Thomas Dee, A Teacher Like Me: Does Race, Ethnicity, or Gender Matter?, *Review of Economics and Statistics*, May 2005, <http://www.mitpressjournals.org/doi/abs/10.1162/003465304323023750#.V2SifvkrLIV>.

^{vii} Villegas & Irvine (186).

Appendix A. Percentage of students and teachers of color and disproportionality rate by state: SASS 2011-12

RANK	STATE	OF COLOR POPULATION		DISPROPORTIONALITY RATE
		TEACHERS	STUDENTS	
1	Hawaii	68%	86%	1.26
2	District of Columbia	64%	92%	1.44
3	New Mexico	43%	74%	1.72
4	Florida	31%	58%	1.86
5	Arkansas	18%	36%	1.98
6	Texas	35%	69%	1.98
7	Alabama	21%	42%	1.99
8	Mississippi	27%	54%	2.00
9	Louisiana	26%	53%	2.02
10	New York	24%	52%	2.16
11	Wyoming	9%	20%	2.17
12	Georgia	24%	56%	2.33
13	South Carolina	19%	47%	2.46
14	Vermont	3%	8%	2.51
15	California	29%	74%	2.55
16	Oklahoma	18%	46%	2.57
17	USA	18%	48%	2.62
18	New Jersey	18%	49%	2.72
19	Maine	3%	8%	2.74
20	Missouri	9%	26%	2.86
21	Illinois	17%	49%	2.89
22	Arizona	20%	58%	2.89
23	North Carolina	16%	48%	2.97
24	Washington	13%	40%	3.06
25	Virginia	15%	46%	3.10
26	Idaho	7%	22%	3.14
27	Kentucky	6%	19%	3.14
28	Oregon	11%	35%	3.15
29	Nevada	19%	63%	3.29
30	Delaware	15%	50%	3.36
31	Maryland	17%	58%	3.38
32	Alaska	14%	49%	3.51
33	Colorado	12%	44%	3.66
34	Tennessee	9%	33%	3.66
35	Ohio	7%	26%	3.75
36	Michigan	8%	31%	3.85
37	Indiana	7%	28%	3.93
38	West Virginia	2%	8%	4.14
39	North Dakota	4%	17%	4.20
40	Montana	4%	19%	4.77
41	Minnesota	5%	27%	5.40
42	New Hampshire	2%	11%	5.44
43	Connecticut	7%	39%	5.59
44	Kansas	5%	33%	6.52
45	Wisconsin	4%	26%	6.57
46	Rhode Island	5%	36%	7.20

RANK	STATE	OF COLOR POPULATION		DISPROPORTIONALITY RATE
		TEACHERS	STUDENTS	
47	Pennsylvania	4%	29%	7.34
48	Utah	3%	23%	7.51
49	Nebraska	3%	30%	9.94
50	South Dakota	2%	22%	10.78
51	Massachusetts	3%	33%	10.99
52	Iowa	1%	19%	19.31

SOURCES: U.S. Department of Education, National Center for Education Statistics, *Schools and Staffing Survey*, 2011–12; U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), *State Nonfiscal Survey of Public Elementary and Secondary Education*, 2011–12.

Appendix B. Average percentage of students and teachers of color and disproportionality rate for Pennsylvania counties: ACS 2006-2010

RANK	COUNTY	OF COLOR POPULATION		DISPROPORTIONALITY RATE
		TEACHERS	STUDENTS	
1	Pike	10.5%	15.5%	1.48
2	Somerset	2.0%	3.5%	1.75
3	Wayne	3.8%	6.8%	1.80
4	Philadelphia	33.5%	77.9%	2.32
5	Chester	7.3%	20.2%	2.76
6	Westmoreland	3.0%	8.2%	2.78
7	Columbia	1.9%	6.1%	3.17
8	Montgomery	7.7%	25.0%	3.23
9	Delaware	10.7%	36.4%	3.39
10	Allegheny	7.2%	27.9%	3.85
11	Franklin	3.2%	13.4%	4.20
12	Butler	1.3%	5.7%	4.50
13	Fayette	2.2%	9.8%	4.57
14	Carbon	2.2%	10.5%	4.76
15	Indiana	1.0%	4.8%	4.78
16	Lebanon	4.0%	20.6%	5.20
17	Dauphin	7.9%	41.9%	5.33
18	Lancaster	4.2%	22.2%	5.34
19	Northampton	5.2%	28.9%	5.58
20	Berks	5.2%	31.2%	5.99
21	Lycoming	1.8%	12.3%	6.69
22	Bucks	2.3%	15.6%	6.92
23	Lehigh	5.7%	39.6%	6.98
24	Beaver	1.9%	13.6%	7.33
25	Cumberland	1.9%	13.7%	7.36
26	Centre	1.6%	11.7%	7.49
27	Bradford	0.6%	4.5%	7.60
28	York	2.5%	19.6%	7.72
29	Monroe	4.4%	40.5%	9.10
30	Erie	2.0%	18.6%	9.12
31	Venango	0.8%	7.7%	9.46
32	Washington	1.0%	9.4%	9.50
33	Luzerne	1.5%	16.2%	10.82
34	Crawford	0.5%	6.9%	14.02
35	Adams	0.7%	13.7%	18.80
36	Schuylkill	0.3%	6.9%	19.79
37	Mercer	0.7%	13.9%	20.19
38	Lackawanna	0.6%	14.8%	25.88
39	Armstrong	0.0%	3.6%	X
40	Clearfield	0.0%	4.0%	X
41	Blair	0.0%	6.6%	X
42	Northumberland	0.0%	8.3%	X
43	Cambria	0.0%	8.4%	X
44	Lawrence	0.0%	12.7%	X

NOTE: Student data includes all relevant children enrolled in public and private schools. Teacher data includes all elementary, middle, and secondary school teachers.

NOTE: Due to the size of the standard errors in the reported percentages of teachers by individual race, the percentages of all teachers of color were calculated by subtracting the percentage of white teachers from 100%. The symbol "X" indicates that the disproportionality rate could not be calculated due to zero reported teachers of color.

NOTE: Data was reported by county for 44 of Pennsylvania's 67 counties. Counties without reported data are the counties in the state with a population size that is less than 50,000. U.S. Census Bureau, 2010 Census Redistricting Data Summary File. The following 23 counties did not report data on teacher diversity: Bedford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Warren, and Wyoming.

SOURCE: U.S. Census Bureau, 5-year American Community Survey (ACS), Equal Employment Opportunity (EEO) Tabulation 2006-10; U.S. Department of Education, National Center for Education Statistics (NCES), Education Demographic and Geographic Estimates (EDGE), ACS 2006-10 Profile.

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Appendix C. Average percentage of students and teachers of color and disproportionality rate for large city school districts within Pennsylvania: ACS 2006-2010

RANK	CITY	OF COLOR POPULATION		DISPROPORTIONALITY RATE
		TEACHERS	STUDENTS	
1	Philadelphia City	34%	78%	2.32
2	Pittsburgh City	15%	54%	3.74
3	Bethlehem City*	10%	47%	4.71
4	Lancaster City*	10%	70%	7.05
5	Reading City	10%	87%	9.15
6	Allentown City	7%	73%	11.02
7	Erie City	3%	38%	11.91
8	Scranton City	2%	26%	12.64

* For both Bethlehem City and Lancaster City, the student population is based on the entire school district, which includes both the city and township. The teacher population is based only on the city. For all other cities in this table, the school district includes only the city.

NOTE: Student data includes all relevant children enrolled in public and private schools. Teacher data includes all elementary, middle and secondary teachers.

NOTE: Due to the size of the standard errors in the reported percentages of teachers by individual race, the percentages of all teachers of color were calculated by subtracting the percentage of white teachers from 100%.

NOTE: The estimates for teachers are based on the Equal Employment Opportunity Tabulation, which only includes a limited number of geographies when reporting at the city level.

SOURCE: U.S. Census Bureau, 5-year American Community Survey (ACS), Equal Employment Opportunity (EEO) Tabulation 2006-10; U.S. Department of Education, National Center for Education Statistics (NCES), Education Demographic and Geographic Estimates (EDGE), ACS 2006-10 Profile.